Application No.: 09/714,283

REMARKS

I. Introduction

In response to the Office Action dated January 24, 2005, Applicants have added claims 24-26. Support for these amendments can be found, for example, in Figs. 3A-3F of Applicants' drawings. No new matter has been added.

For the reasons set forth below, Applicants respectfully submit that all pending claims are patentable over the cited prior art references.

II. Telephonic Interview

In order to expedite prosecution, Applicants' representative initiated a telephone interview with Examiner Good Johnson. Applicants and Applicants' representative would like to thank Examiner Good Johnson for her courtesy in conducting the interview on February 15, 2005 and for her assistance in resolving issues. During the interview, Applicants' representative explained why the claims as currently written in relation to the three-dimensional positional information are patentable over the cited prior art. As a result, the Examiner tentatively agreed that the prior art does not disclose utilizing a three-dimensional coordinate, and requested that the arguments be presented in a formal response, at which point she would conduct further prior art seach to determine the patentability of the instant application.

III. Claim Amendment

The ***finality*** of the outstanding Office Action is ***premature***. The reasons previously presented (and further in view of those presented herein) are presumed to convince the Examiner

that the rejected claims are in fact allowable. It is respectfully requested that new claims 24-26 are entered as a matter of right, as the final rejection is premature.

IV. The Rejection Of Claims 1-6, 9-18 and 21-23 Under 35 U.S.C. § 102

Claims 1-6, 9-18 and 21-23 are rejected under 35 U.S.C. § 102(e) as being anticipated by USP No. 5,331,419 to Yamada. Applicants respectfully traverse this rejection for at least the following reasons.

Claim 1 recites in-part "an image synthesizer which generates a scale image ... in accordance with ***three-dimensional*** positional information of the object and for ***combining*** the scale image with the image of the object."

In the August 23, 2004 response, Applicants argued, "Yamada does not expressly disclose or suggest that the synthesis means generates a scale image in accordance with the ***three-dimensional*** positional information." In response, the Examiner asserted, "it is the Examiner's position that any image generated of an object in real size would include three-dimensional parameters, because objects of the real world include two and three-dimensional information (see, page 6, last paragraph of Office Action)."

However, it is respectfully submitted that this statement as a prelude to interpret the claimed ***three-dimensional*** positional information is not a proper basis for rejecting Applicants' claims. It is directed to the ***Examiner's opinion*** rather than what is taught by the prior art. It is submitted that the "Examiner's opinion" cannot be relied on to replace the deficiency of a prior art reference. If the Examiner intended to take Official Notice that the differences between the present invention and the cited prior art are well known in the art, then pursuant to **M.P.E.P. § 2144.03**, Applicants respectfully traverse such an assertion and request the Examiner to cite one

or more references in support of her position (see, second paragraph, last three lines of **M.P.E.P. § 2144.03**, which requires the Examiner to cite a reference in support of her allegation of Official Notice when Applicants traverse).

Furthermore, the Examiner cited Fig. 13 of Yamada and asserted, "Yamada discloses detecting a first object on a first plane and detecting a second object on a second position relative to a second plane and obtaining from the measured information the actual size of the objects in relation to one another." However, as discussed during the interview, the distance between the measured points of P and Q is ***two-dimensionally*** determined using their respective coordinate positions and angles. This is evidenced by the fact that Yamada ***expressly*** defines the distance (size) between the measured points P and Q as L, the distance from the CCD image sensor 350 to the measured points P and Q as l_2 and l_1, and the angles of the measured points P and Q with respect to the optical axis as θ_1 and θ_2. That is, all the parameters/coordinates defining the measured points P and Q are based on a ***two-dimensional*** scale, as readily indicated by the formula "1" of Yamada (see, col. 21, line 48) and as recognized by the Examiner (i.e., a first object on a ***first*** plane ... and ... a second object on ... a ***second*** plane, see, page 6, last 5 lines of Office Action). As such, it is respectfully submitted that the measured points P and Q of Yamada cannot be construed as the claimed three-dimensional positional information, because the claimed three-dimensional positional information requires ***three*** separate and distinct planes or coordinates (e.g., orthogonal coordinate system x-y-z or spherical coordinate system r-θ-Ø), whereas the measured points P and Q of Yamada are, at best, defined by two planes.

Additionally, during the interview, the Examiner asserted that Yamada utilizes the "depth" (see, col. 16, line 2) so that a three-dimensional picture would necessarily result. However, Applicants respectfully disagree with this interpretation, because the "depth" disclosed

in Yamada refers to the size of the view field, and is completely ***irrelevant*** in determining the coordinates of the measured points P and Q, let alone the three dimensional coordinates thereof. This is supported by the express definition given in Yamada; namely the "depth" of the view field is calculated from the ***distance*** information and the iris information to determine the accuracy of the auto-focus (AF) function and the accuracy of the scale pattern such that the ***measured points P and Q are included in the maximum depth of view field*** (see, col. 24, lines 25-28). Further, a "depth" merely contains a single dimensional axis, and Yamada is silent with regard to using the depth in conjunction with the coordinates or planes of the measured points P and Q to determine the three dimensional coordinates thereof. Indeed, as discussed *supra*, Yamada does not disclose or suggest any means for determining or storing any three dimensional coordinate, let alone manipulate the three dimensional coordinates of an object after the image of an object has been taken.

Accordingly, it is respectfully submitted that the synthesis means of Yamada does not generate a scale image in accordance with ***three-dimensional*** positional information of the object, as recited by claim 1.

With respect to claim 18, this claim recites "... scaling the image up or down in accordance with ***three-dimensional*** positional information of the object ...." However, it is important to note that Yamada expressly defines the coordinate P as the position of the object 354 and the coordinate Q as the position of the object 353, where the coordinate P is positioned on a plane ***parallel*** to that of the coordinate Q (see, col. 21, lines 15-21). That is, the plane of Yamada only defines a two-dimensional coordinate, and Yamada is completely silent with regard to utilizing a three-dimensional image/object, let alone perform scaling thereof.

Moreover, in the previous response, Applicants argued, "nowhere does Yamada disclose or suggest ... ***combining images of multiple objects*** together in accordance with three-dimensional positional information of the objects ...." In response, the Examiner asserted, "Yamada discloses two objects captured in the same visual field the size between the measure points on the objects and scale data is calculated (see, page 7, 1st paragraph of Office Action)." As a preliminary matter, it is not entirely understood how the measured points P and Q of Yamada are ***combined*** together in the manner perceived by the Examiner, and it appears the Examiner has misunderstood Applicants' previous arguments. Specifically, Applicants were NOT arguing that Yamada does not disclose capturing two images in the same visual field. Instead, Applicants were arguing that Yamada does not discuss or even recognize combining the measured points of one object with those of a second object.

In direct contrast, in accordance with one exemplary embodiment of the present invention, the user may combine the desk image shown in Fig. 6C with the room image shown in Fig. 6D by specifying the alignments point α on the desk image and alignment point β on the room image in a manner that the two alignment points α and β are arranged at the ***same*** position within the three-dimensional space (see, page 25, lines 15-22 of the specification). However, as is apparent, the alleged images of Yamada are not combined in any manner alleged by the pending rejection. If the pending rejection is maintained, it is respectfully requested that the next Office Action address how the images of Yamada are combined so as to provide the Applicants an opportunity to further address and/or rebut these issues.

As a final note, during the interview, the Examiner alleged that the alignment points of the present invention are not three dimensional coordinates, and therefore combining the scale image with the image of the object need not be accomplished in a three dimensional

environment. However, it is respectfully submitted that an exemplary embodiment of the present invention describes the alignment point α as having the coordinates (xα , yα , cα), and the alignment point β as having the coordinates (xβ, yβ, cβ) (see, e.g., page 26, lines 16-21 of the specification). As such, it is respectfully submitted the alignment points of the present invention can be utilized in a three-dimensional environment.

Accordingly, for all of the foregoing reasons, it is respectfully submitted that the synthesis means of Yamada does not ***combine*** the scale image with the image of the object, as recited by claim 1.

With regard to claims 10 and 23, as these claims also recite the claimed feature "... combines respective images of multiple objects together ... with three-dimensional positional information of the objects," it is respectfully requested that claims 10 and 23 be allowed for the reasons discussed above with respect to claim 1.

As anticipation under 35 U.S.C. § 102 requires that each element of the claim in issue be found, either expressly described or under principles of inherency, in a single prior art reference, *Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983)*, and at a minimum, Yamada fails to disclose the foregoing claim elements, it is clear that Yamada does not anticipate claims 1, 10, 18 and 23, or any of the claims dependent thereon.

V. All Dependent Claims Are Allowable Because The Independent Claims From Which They Depend Are Allowable

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.,*

819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as independent claims 1, 10, 18 and 23 are patentable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also in condition for allowance.

Furthermore, claims 7 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamada. However, as these claims are dependent upon claim 1, which is submitted to be allowable for the reasons discussed above, it is respectfully submitted that claims 7 and 8 are also allowable by virtue of their dependence.

VI. Conclusion

Accordingly, it is urged that the application is in condition for allowance, an indication of which is respectfully solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

Application No.: 09/714,283

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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